What is thunderstorm asthma?

Thunderstorm asthma is mostly triggered by an uncommon type of thunderstorm that causes grass pollen grains to be swept up into the clouds as a storm forms during grass pollen season. When they absorb moisture, the pollen grains burst open and release large amounts of small allergen particles. These particles are so small that they can be breathed deeply into the lungs. In some people this will cause the lungs to become irritated. Irritation can cause swelling, narrowing and extra mucus production in the small airways in the lung. This makes it difficult to breathe and can result in asthma symptoms such as wheezing, chest tightness and coughing. These asthma symptoms may become severe very quickly.

Not all thunderstorms in pollen seasons result in thunderstorm asthma.

Who is at risk of thunderstorm asthma?

Thunderstorm asthma can affect people living in metropolitan, regional or rural areas. It can affect people who have never been diagnosed with asthma. Those at increased risk of thunderstorm asthma include people with a history of asthma, people with undiagnosed asthma (see below) and people with hay fever (particularly seasonal hay fever) or an allergy to grass pollen.

Could I have undiagnosed asthma?

The most common symptoms of asthma are:

- wheezing – a continuous, high-pitched sound coming from the chest while you are breathing
- shortness of breath – a feeling of not being able to get enough air
- a feeling of tightness in the chest
- coughing – alongside the other symptoms.

You do not need to have all of these symptoms to be diagnosed with asthma and they may come and go. If you suspect you might have asthma, it is important to see your doctor for a professional diagnosis. Don't ignore it – if you do have asthma, the sooner you get it under control, the sooner your lungs will improve, the better you will feel and the more prepared you will be for any further thunderstorm asthma events.

For more information on the symptoms and causes of asthma, visit: https://www.betterhealth.vic.gov.au/health/conditionsandtreatments/asthma

How can I prepare for thunderstorm asthma?

If you have been diagnosed with asthma, have symptoms of asthma or have a history of seasonal hay fever, you need to be alert to the potential dangers of thunderstorm asthma. Be aware of when thunderstorms are forecast particularly on HIGH or EXTREME pollen count days.
To prepare:

- If you have asthma it is important you have a current asthma action plan and that you regularly use your preventer medication.
- Discuss the possibility of thunderstorm asthma with your doctor and include it in your asthma action plan
- If you don’t use a preventer, see your doctor to discuss whether you would benefit from preventer treatment
- Where possible avoid the potential allergens blown on the winds of the approaching thunderstorm by staying indoors with doors and windows closed until the storm front has passed. Remain alert for any asthma symptoms.
- Remember that better control and management of your hay fever can also improve your asthma control. Speak to your doctor or pharmacist about hay fever treatments.

As the thunderstorm approaches:

- Always carry your reliever medication with you. This is your emergency asthma first aid medication.
- Know the signs of worsening asthma and the asthma first aid steps.
- If you start developing asthma symptoms, follow your asthma action/management plan.
- If you don’t have a blue reliever puffer, try to get one (you can get these over the counter at any pharmacy) and follow the asthma first aid steps.
- If at any point you are concerned your asthma is rapidly worsening, call 000 and say you are having an asthma attack. Signs of rapid deterioration include little or no relief with a reliever inhaler, being unable to speak comfortably, or if a person’s lips are turning blue.

How can I stay informed?

- Melbourne Pollen Count – [free mobile app](http://www.pollenforecast.com.au/)
- Deakin University (AirWatch) grass pollen forecast [www.deakin.edu.au/students/faculties/sebe/les-students/airwatch](http://www.deakin.edu.au/students/faculties/sebe/les-students/airwatch)
- The Asthma Australia Asthma App - available from iTunes
- 1800 Asthma (phone 1800 278 462) - speak to an asthma educator

Where to get help in an emergency

- In an emergency, always call triple zero (000)
- Emergency department of your nearest hospital
- Your doctor
- Your nearest pharmacy (for medication)
- NURSE-ON-CALL Tel. 1300 60 60 24 – for expert health information and advice (24 hours, 7 days)
- National Home Doctor Service Tel. 13 SICK (13 7425) for after-hours home doctor visits (bulk billed).